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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/771,935

02/05/2004

Samuel Alan Johnson

3769

26582 7590 06/19/2007  
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EXAMINER
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LAUX, JESSICA L

ART UNIT	PAPER NUMBER
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3635

MAIL DATE	DELIVERY MODE
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06/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/771,935	Applicant(s) JOHNSON, SAMUEL ALAN	
	Examiner Jessica Laux	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Acknowledgment is made of the amendment filed 04/24/2007.

Accordingly the specification, drawings and claims 1, 2, 4 and 5 have been amended. Claims 7-8 remain withdrawn.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, with respect to the drawing objections have been fully considered and are persuasive. The objection to the drawings has been withdrawn.

#### ***Claim Objections***

Claim 6 is objected to because of the following informalities: the status identifier of claim 6 indicates amendments to the claim, however there does not appear to be any amendment to the claim. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 – it is noted that the “single beams” of claim 2 are not positively claimed and currently are recited functionally as an intended use limitation. It is unclear whether applicant intended to positively claim the “single beams” or not.

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Claims 1 and 4 – claim 1 recites “other structural elements” which applicant stated in the remarks filed 04/24/2007 are the rings 11 and 12, however claim 4 further recites the truss elements on one end of the other structural elements are connected, on one end of the structure to an attachment ring and on the other end of the structure to a rotateable ring. It is therefore, unclear in light of the remarks, drawings, and specification which elements are the “other structural elements” and which elements are the rings. Further the specification and drawings are not enabling under 35 USC 112, first paragraph for truss elements connected to “other structural elements on opposing ends and also connected to rings. Additionally regarding claims 1 and 4 it is unclear whether each opposed end of the truss elements is connected to at least two other structural elements or one other structural element, and are the multiple truss elements on each end connected to different other structural elements are the same structural elements. Further regarding claim 4, it is unclear what neighboring ones of truss elements is reciting as the claims do not provide structure or structural relationships for “neighboring ones of said truss elements”, in such as way as to enable one skilled in the art to understand, know, and use the invention.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Okazaki et al (5003736).

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Regarding claim 1: Okazaki et al. discloses a space frame structure, capable of deployment or retraction comprising multiple truss elements (the combined structure of elements 3, 5), multiple beam elements (3) forming each one of said multiple truss elements, and each one of said truss elements being capable of existing in either a straight and rigid condition, or existing in a curved and flexible condition, with opposed ends of said truss elements connected to at least two other structural elements (where there are at least two diagonal braces, 6, connected to each truss element) desired to be held spaced apart in a prescribed orientation.

Regarding claim 3: The invention of claim 1 wherein said truss elements are comprised of a carbon fiber composite material (Col. 1, line 38).

Regarding claim 4 (as best understood): The invention of claim 1, wherein neighboring ones of said truss elements on one end of the at least two structural elements are connected on one end of the structure (such as at bottom, 1) to a fixed attachment ring and on another end of the structure to a rotateable deployment ring (such as at top, 2), and said truss elements are configured to effect a condition of creating parallel truss pairs when it is desired to collapse the structure, and to likewise create a condition when it is desired to deploy and rigidify the structure by rotation of said deployment ring to triangulate successive truss pairs

Regarding claim 6: The invention of claim 4, wherein provision is made to automate and mechanize the apparatus for automatic deployment or automatic retraction (Col. 2, lines 11-13).

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***Allowable Subject Matter***

Claims 2 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Laux whose telephone number is 571-272-8228. The examiner can normally be reached on Monday thru Friday, 6:30am to 2:30pm (est).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JL  
05/30/2007



Jeanette Chapman  
Primary Examiner